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S. 14 – The Energy Policy Act of 2003

Calendar No. 79

S. 14 was originally reported from the Committee in Energy and Natural Resources as S. 1005 on April 30, 2003, by a vote of 13-10. The bill was then put on the Senate Calendar using Rule XIV, and took the bill number S. 14. S. Rpt. 108-43.

NOTEWORTHY

- The Energy Policy Act of 2003 intends to provide a comprehensive national energy policy that balances domestic energy production with conservation and efficiency efforts to enhance the security of the United States and decrease dependence on foreign sources of oil
- The bill clears the way for the construction of a natural gas pipeline in Alaska; fully funds President Bush's Clean Coal Power Initiative; indefinitely extends Price-Anderson Act liability protections for Nuclear Regulatory Commission licensees, Department of Energy contractors and non-profit educational institutions; includes significant funding for hydrogen fuel research programs; and includes an electricity title, which pushes back final passage of the Federal Energy Regulatory Commission's standard market design plan two years, amends the Public Utility Regulatory Policies Act of 1978, and repeals the Public Utility Holding Company Act of 1935. The bill also assists Indian Tribes and individual Indians in the development of Indian energy resources.
- The bill makes no provision for opening ANWR to oil and gas exploration and development. The bill does not include a climate title, a Renewable Portfolio Standard or Renewable Fuel Standard, and does not impose additional fuel efficiency standards on passenger vehicles, light trucks, Sport Utility Vehicles or minivans. It does, however, direct the Secretary of Transportation on which matters to consider when determining maximum feasible average fuel economy.
- On April 2, 2003 the Senate Finance Committee adopted, by voice vote, S. 597, an \$18.6 billion package of energy-related tax provisions meant to encourage alternative and traditional energy production, along with conservation and energy efficiency. The provisions of this bill are expected to be added to S. 14 via amendment. See pp. 17-23 of this Notice for further details on the provisions of S. 597.

HIGHLIGHTS

S. 14 contains 278 pages of legislation divided into 11 titles. A printed version of the complete text of the bill is available in the *Congressional Record* (see pages S5543-S5595).

Highlights of key provisions are as follows:

- Includes an Electricity Title that would reduce regulatory uncertainty, promote transmission infrastructure development and security, and increase consumer protections. The title remands the proposed rulemaking on Standard Market Design to the Federal Energy Regulatory Commission (FERC) and prohibits issuance of a final rule before July 1, 2005, amends the Public Utility Regulatory Policies Act of 1978 (PURPA) and repeals the Public Utility Holding Company Act of 1935. It protects transmission access for native load customers and authorizes FERC to exercise limited jurisdiction over unregulated transmitting utilities (like municipals and cooperatives) to ensure open access to the transmission grid.
- Authorizes indefinite extension of the Price-Anderson Act to NRC licensees and
 Department of Energy Contractors and increases the maximum annual assessment under
 the standard deferred premium on NRC licensees from \$10 million to \$15 million. It sets
 the total amount of indemnification for DOE contractors at \$10 billion, and increases
 indemnification for DOE contractors engaged in nuclear activities outside the U.S. from
 \$100 million to \$500 million.
- Authorizes the President's Clean Coal Power Initiative, which provides \$200 million annually to be applied to clean coal research in coal-based gasification technologies.
- Assists Indian Tribes in the development of Indian energy resources by increasing the Tribes' internal capacity to develop their own resources by providing grants and technical assistance, and streamlining the Tribal leasing process so that outside parties have more incentive to partner with Tribes in developing energy resources.
- Authorizes \$1.8 billion for the President's Hydrogen Fuel Cell Initiative. Authorizes new research and development programs for hydrogen vehicle technologies ("FreedomCAR") and for the use of hydrogen as a transportation fuel. The title provides authorization for a variety of programs to demonstrate hydrogen and fuel cells for use in light- and heavy-duty vehicle fleets, stationary power applications (including by Indian tribes and as distributed generation facilities using renewable energy), national parks and international projects.

BACKGROUND

Nearly five decades ago energy demand in the United States began to exceed domestic supply. Department of Energy projections indicate that the disparity between energy supply and demand will continue to grow. This gap places pressure on the market and leads to rising energy prices and economic problems. A combination of energy production, conservation, efficiency, and development of new technologies can help to close the supply and demand imbalance.

U.S. oil production is at a 50-year low and continues to decline, while reliance on foreign oil increases. Oil demand in the transportation sector is projected to grow by 2.5 percent per year from 1999 to 2020 and supplies must continue to keep pace with demand.

Natural gas production in the U.S. is expected to grow about 1.3 percent per year over the next 20 years. Coal production is expected to increase 0.9 percent over the same period. Natural gas currently provides 24 percent of all energy consumed in the U.S. and nearly one-fifth of all electricity generation. Demand for natural gas is expected to outpace supply. Coal remains the primary, and most efficient, fuel for electricity generation, currently accounting for over half of all electric generation in the U.S. Neither coal nor natural gas is expected to offset the overall gap between energy supply and energy demand. The U.S. has the 12th highest proven oil reserves in the world, with 65 percent of those reserves concentrated in Alaska and the Gulf of Mexico. The lower 48 states, including the Gulf of Mexico hold a tremendous supply of natural gas.

Obstacles to development of U.S. energy resources include regulatory hurdles, price volatility, and lack of infrastructure. Development of energy resources on Federal land as well as on Indian lands can be encouraged through regulatory streamlining and economic incentives.

As these market trends continue to evolve, Congress has begun to look at possible solutions to close the supply-demand gap. During the 107th Congress, numerous measures were introduced to deal with energy issues either on a comprehensive or more limited basis. Both the Senate and the House of Representatives passed comprehensive energy policy legislation using H.R. 4, the Securing America's Future Energy Act of 2001, as the primary legislative vehicle. A conference was agreed to but was unable to resolve the differences between the two bodies before the 107th Congress adjourned.

During the 108th Congress, the Senate Energy Committee conducted several hearings examining various aspects of energy. On February 13, the Committee conducted a hearing on Oil Supply and Prices; February 25 on Natural Gas Supply and Prices; February 27 on Energy Production on Federal Lands; March 4 on the Financial Condition of the Electricity Market; March 6 on Energy Use in the Transportation Sector; March 11 on Energy Efficiency and Conservation; and March 27 on various legislative proposals dealing with Electricity. The Committee held business meetings on April 8, addressing Renewable Energy, Energy Efficiency,

Hydrogen, Personnel and Training, and State Energy Programs; April 9 to consider Oil and Gas and Coal; April 10 to consider Nuclear Matters; April 29 to consider Indian Energy, Transportation Fuels, and Research and Development; and April 30 to consider Electricity. On April 30, Senator Domenici introduced S. 14, the Energy Policy Act of 2003.

BILL PROVISIONS

TITLE I – OIL AND GAS

Subtitle A – Oil and Natural Gas Production Incentives

Provides permanent authority to operate the Strategic Petroleum Reserve (SPR), and requires the Secretary of Energy to conduct a study on nationwide and regional petroleum and natural gas storage capacity and operational inventory levels. Allows the Secretary to use royalties taken in kind (RIK) to pay for business-related costs of selling RIK production, including transportation, processing, or disposing of RIK production, as well as administrative costs of the SPR.

Allows the Secretary of the Interior to provide incentives to extend the life of oil wells that may be abandoned due to economic factors, and requires the Secretary to survey the potential offshore oil and natural gas resources of the Outer Continental Shelf (OCS). Provides royalty relief to encourage the development of oil and gas resources at water depths between 400 and 1,600 meters (437.4 to 1749.8 yards) in the Western and Central Gulf of Mexico and for existing, non-producing leases for production in Alaska frontier regions.

Provides a five-year \$20,000,000 annual authorization to the Secretary of the Interior to develop a program to reclaim orphaned or abandoned wells on Federal lands, and provides royalty relief for natural gas production from deep wells in shallow waters in the Gulf of Mexico. Clarifies permitting and rights-of way authority for energy projects, including renewables. Authorizes the distribution of up to 12.5 percent of qualified OCS revenues to states and political subdivisions for impact assistance payments.

Requires the Secretary of the Interior to develop a National Energy Data Preservation Program that would archive data related to oil and gas development, amends the Mineral Leasing Act to authorize the Secretary of Energy to wave acreage cap for oil and gas leased on Federal lands. Requires the Secretary of Energy to assess the economic impact of a disruption of oil supply to Hawaii and the economic feasibility of increasing renewable energy and liquid natural gas use in that state.

Subtitle B – Access to Federal Lands

Directs the President to establish an Office of Federal Energy Permit Coordination within the Executive Office of the President to assist Federal agencies in coordinating the permitting of energy projects on Federal lands. Requires the Secretary of the Interior to establish a Federal Permit Streamlining Pilot Project, which will contain six Western Bureau of Land Management (BLM) offices that will coordinate with the relevant consulting Federal agencies to accelerate the permitting process. Increases the funding to BLM to accelerate onshore oil and gas lease permitting, to ensure timely compliance with the National Environmental Policy Act of 1969 (NEPA), and to increase inspection and enforcement staff.

Requires the Secretary of the Interior to conduct an inventory of the onshore oil and natural gas resources on Federal lands and to identify restrictions or impediments to the exploration, production and transportation of such resources. Requires the Secretary to determine the effects of Federal subsurface oil and gas development policies and management practices on private-owned surface lands. Directs the Secretaries of Interior and Agriculture to designate utility corridors across Federal lands in Western states and establishes the DOE as the lead agency in coordinating efforts to enhance the permit process for transmission rights-of-way outside designated Federal utility corridors.

Subtitle C – Alaska Natural Gas Pipeline

Stipulates the criteria under which the Federal Energy Regulatory Commission (FERC) may issue a certificate of public convenience and necessity to authorize the construction, operation, expansion and regulation of the Alaska gas pipeline, finds that there is public need and sufficient downstream capacity to justify the pipeline, and directs FERC to approve or deny the certificate within 60 days. Prohibits FERC from approving a Northern pipeline route through Canada. Clarifies that the project is subject to the National Environmental Policy Act (NEPA) and designates FERC as the lead agency for NEPA compliance.

Establishes criteria that must be met before FERC is authorized to permit expansion of the pipeline and establishes an independent Office of the Federal Coordinator for Alaska Natural Gas Transportation Projects within the executive branch to ensure compliance and coordination of the Federal agencies related to the Federal permits. Establishes that the U.S. Court of Appeals for the District of Columbia shall have jurisdiction over the pipeline project and that the State of Alaska shall have jurisdiction over all instate distribution and rate-setting. Directs the Secretary of Energy to study alternative means of construction and operation within 18 months of enactment.

Clarifies authorization of Federal agencies responsible for permits or rights-of-way to modify leases or permits related to the Alaska Natural Gas Transportation Act of 1976 as long as it does not require a route change in the Alaska gas pipeline project. Urges pipeline sponsors to

use North American steel and to negotiate project labor agreements and maximize small business participation, and requires the Comptroller to conduct a study of small business participation.

Authorizes the Secretary of Labor to make grants, totaling up to \$20 million, to the Alaska Department of Labor and Workforce Development to train dislocated workers to work on the pipeline project. Authorizes the Secretary of Energy to provide Federal loan guarantees to certificate holders of up to 80 percent of total capital costs not exceeding \$18 billion. Contains a Sense of the Congress resolution regarding future natural gas demand and the need for additional production from Alaska, the continental U.S. and Canada.

TITLE II – COAL

Subtitle A – Clean Coal Power Initiative

Provides \$200 million annually between 2003 and 2011 for the President's Clean Coal Initiative. Directs that at least 80 percent of the funds be used for gasification technologies, while the remainder should be used for carbon separation and capture technologies, hybrid gasification/combustion and other technologies. All projects must demonstrate financial viability before becoming eligible for program funds, and Federal funding for specific projects must not exceed 50 percent of the total. Requires the Secretary of Energy to report to Congress on the progress of the program and authorizes the Secretary to make competitive, merit-based research grants to universities.

Subtitle B – Federal Coal Leases

Authorizes the Secretary of the Interior to expand an existing lease outside the lease-by-lease application process by no more than 320 acres, to extend the 40-year mine out rule to ensure maximum economic recovery of a coal deposit, and extend the period an operator could prepay advance royalties in lieu of operation from ten to twenty years and for recovery of prepaid royalties beyond twenty years.

Subtitle C – Powder River Basin Shared Mineral Estates

Requires the Secretary of Interior to review the Department's authority to resolve a conflict between the development of coal and coalbed methane from the same lease and to report to Congress on a potential solution to this problem.

TITLE III – INDIAN ENERGY

Establishes an Office of Indian Energy Policy and Programs within the Department of Energy and authorizes \$20 million in annual grant authority to promote planning and development of energy infrastructure and an additional \$2 billion to provide loan guarantees for energy projects.

Amends Title XXVI of the Energy Policy Act of 1992. A summary of the proposed title, as amended, is as follows:

Authorizes the Secretary of Energy to provide tribes grants, low-interest loans and technical assistance to develop energy resources located on Indian land. Authorizes the Secretary of Interior to provide grants for legal training and implementation of tribal laws governing energy development and environmental protection. Streamlines the energy development leasing process by allowing leases or business agreements to be contracted without secretarial approval as long as they conform to regulations promulgated by the Secretary. Establishes a process by which a tribe must submit a plan governing leases and rights-of-way to the Secretary for approval.

Directs the Bonneville Power Authority and Western Area Power Authority (WAPA) to clarify their authority to purchase power from tribes and for tribes to use WAPA allocations for the same purpose. Directs the Secretary of the Interior to report to relevant Committees the potential barriers to energy development contained in the Indian Mineral Development Act, with suggestions for removing them. Requires the Secretary of Energy to undertake a demonstration project to study the feasibility of using wind energy generated by Indian tribes and hydropower generated by the Army Corps of Engineers on the Missouri River to supply firming power to WAPA.

Makes the Dine Power Authority of the Navajo Nation eligible for demonstration funding under Section 2602 and Section 302 of this Act. Directs the Secretary of Housing and Urban Development to provide technical assistance for Tribes and Tribal housing entities to expand the use of energy-efficient technologies in new home construction and housing rehabilitation. Requires the Secretaries of Energy and Interior to consult with Indian Tribes in carrying out this Act.

TITLE IV – NUCLEAR

Subtitle A – Price-Anderson Amendments

Indefinitely extends the authorization for indemnification provisions for Nuclear Regulatory Commission (NRC) licensees and Department of Energy (DOE) contractors, increases the maximum annual assessment under the standard deferred premium on NRC licensees from \$10 million to \$15 million, sets the total amount of indemnification for DOE contractors at \$10 billion, and increases indemnification for DOE contractors engaged in nuclear activities outside the U.S. from \$100 million to \$500 million.

Requires the NRC to adjust for inflation the standard deferred premium for NRC licensees every five years. Allows the NRC to consider small modular reactors at one site as a single facility for Price-Anderson indemnification. Ends the automatic remission of civil

penalties for nuclear safety violations by nonprofit DOE contractors and establishes a limit on such civil penalties.

Subtitle B – Deployment of Commercial Nuclear Plants

Requires the Secretary of Energy to provide financial assistance to supplement private sector financing if it is determined that the plant is necessary to contribute to energy security, fuel or technology diversity, or clean air attainment goals.

Subtitle C – Advanced Reactor Hydrogen Co-Generation Project

Establishes a project to conduct research, development, design, construction, and operation of a hydrogen production co-generation testbed that enhances safety features, reduces waste production, enhances thermal efficiencies, increases proliferation resistance, and has potential for improved economics and physical security in reactor siting over current commercial reactors. Establishes several project requirements, including that a U.S. company must take industrial lead, international cooperation must be sought, both electricity and hydrogen production must be demonstrated, cost-shared partnerships with U.S. or international industry are encouraged, the system must be operational by 2010 and selection of final project design must maximize cost-sharing opportunities and minimize Federal expenditures, among others.

Subtitle D – Miscellaneous Matters

Sets a limit on annual sales and deliveries of uranium from U.S. government stockpiles. Sales must be conducted through long-term contracts. Establishes a preference for government transfer to entities employing recovery and extraction of uranium from contaminated uranium-bearing materials. Certain transfers are exempt from these limits. Establishes a pilot program to decommission and decontaminate the sodium-cooled fast breeder experimental test-site reactor in Arkansas and authorizes appropriation of \$16 million.

TITLE V – RENEWABLE ENERGY

Subtitle A – General Provisions

Requires DOE to conduct periodic assessments of U.S. renewable energy resources, infrastructure and other relevant information and submit annual reports. Extends funding for renewable energy incentive programs. Requires DOI to develop recommendations on development of renewable resources on public lands, and report to Congress. Requires the National Academy of Sciences to study the potential for renewable energy development in Outer Continental Shelf (OCS) areas, and report to Congress. Sets minimum renewable energy purchasing requirements for the Federal government. Requires the Secretary of Energy to update energy surveys, estimates and assessments for certain insular areas.

Subtitle B – Hydroelectric Licensing

Deals with alternatives to mandatory conditions under sections 4(e) and 18 of the Federal Power Act.

Subtitle C – Geothermal Energy

Authorizes the Secretary of the Interior to accept nominations for lands to be made available for geothermal leasing, and requires a competitive lease sale at least once every two years in states with nominations and non-competitive leasing in states with no competitive bids. Requires the Secretaries of Agriculture and the Interior to enter into a memorandum of understanding regarding leasing and permitting for geothermal development on Federal lands. Requires the Secretaries of the Interior and Defense to provide recommendations to resolve permitting and leasing procedure differences for geothermal development on lands withdrawn for military purposes.

Provides for reinstatement of leases terminated after inadvertent failure to pay rental payments. Requires the Secretary of Energy to promulgate regulations that simplify the methodology for calculating the amount or value of steam for the purpose of calculating royalties.

Subtitle D – Biomass Energy

Authorizes grants to help offset the cost of purchasing certain biomass from Federal or Indian lands for electricity, heat, transportation fuels, or petroleum-based substitutes, and to encourage the use of biomass within communities near Federal lands at risk from catastrophic wildfire, disease or insect infestation. Requires the Secretaries of the Interior and Agriculture to submit a joint report to Congress on the results of the program three years after the date of enactment.

TITLE VI – ENERGY EFFICIENCY

Subtitle A – Federal Programs

Changes the baseline for Federal energy performance from 1985 to 2000 and requires a 20 percent improvement over 2000 levels by 2013. Provides exemptions under certain conditions and agencies are allowed to retain energy savings. Requires Federal buildings to meter electricity use to the maximum extent possible and directs the Secretary to establish new energy efficiency performance standards for Federal buildings. Permanently extends existing authority for Federal agencies to contract with energy service companies to install energy and water conservation equipment and renewable energy systems in Federal facilities or buildings.

Directs agencies to procure Energy Star or Federal Energy Management Program (FEMP)-designated energy efficient products and to select only premium efficiency motors. Directs the Architect of the Capitol to develop an energy and water conservation plan for congressional buildings. Amends the Solid Waste Disposal Act to provide increased use of recovered mineral components in Federally funded projects, and amends the National Energy Conservation Policy Act to encourage Federal agencies to participate to improve energy efficiency, conserve water, or manage electricity demand. Requires the Secretary to contract with the National Academy of Sciences to study energy efficiency standards.

Subtitle B – State and Local Programs

Authorizes \$20 million annually for fiscal years 2004 to 2006 to make grants to various local entities for energy efficiency and renewable energy projects in low-income communities. Authorizes the Secretary of Energy to make grants to states to assist local governments to improve the energy efficiency and environmental quality of public buildings. Authorizes DOE to provide funds to States with rebate programs for consumers who exchange inefficient appliances for new, energy-efficient units.

Subtitle C – Consumer Products

Establishes test procedures for various electricity-using products and requires the Secretary of Energy to prescribe test procedures for several other products within three years to determine whether to issue energy conservation standards for such products. Directs the Federal Trade Commission to determine the effectiveness of the current consumer products labeling program and directs the Secretary of Energy or the FTC to prescribe labeling requirements for various electricity using products. Provides statutory authority for Energy Star Program at DOE and EPA to establish new categories and specifications or criteria, and specifies public participation criteria for rules changes. Authorizes DOE, in cooperation with EPA, to carry out a public education program on the energy savings benefits of maintenance of air conditioning, heating and ventilation systems and authorizes the Small Business Administration to work with the DOE and EPA to provide energy efficiency information to small business.

Subtitle D – Public Housing

Requires activities which provide energy efficient, affordable housing and residential energy conservation measures under the HUD Demonstration Act, increases Community Development assistance 10 percent for energy conservation and efficiency, and provides an additional 10 percent increase in property value covered by FHA mortgage insurance when a solar energy system is installed. Allows the Public Housing Capital Fund to include use for certain improvements for energy efficiency, and allows grants for multifamily housing projects to be used for improved energy efficiency.

Amends the NAFTA Implementation Act to encourage financing of clean and efficient energy and energy conservation projects by the North American Development Bank. Requires public housing agencies to purchase Energy Star or FEMP-designated products where it is cost-effective, updates efficiency standards used in Cranston-Gonzalez low-income housing programs to current best codes and practices, and requires HUD to develop and implement an integrated energy strategy for public and assisted housing and to report to Congress.

TITLE VII – TRANSPORTATION FUELS

Subtitle A – Alternative Fuel Programs

Requires Federal agencies to purchase alternative fuel vehicles unless the Secretary determines that alternative fuel is not reasonably available or is unreasonably expensive, and amends the Energy Policy Act of 1992 to allow for the awarding of credits to Federal fleets or covered persons towards compliance with alternative fuel vehicle purchase mandates by using alternative fuels in medium- and heavy-duty vehicles. Includes zero-emission, low speed electric vehicles in the definition of alternative fuel vehicles in the Energy Policy Act as long as their top speed does not exceed 25 mph.

Allows Federal fleets or covered persons to earn multiple credits towards alternative fuel vehicle purchase mandates by purchasing alternative fuel medium-duty or heavy-duty vehicles and for investment in alternative fuel infrastructure. Requires the General Services Administration to allocate the incremental cost of alternative fuel vehicles across the entire fleet of motor vehicles distributed by the GSA. Requires the Secretary of Energy to study the impact that alternative fuel vehicle programs in the Energy Policy Act of 1992 have had on the development of alternative fueled vehicle technology, market availability of fuel, and cost of light duty alternative fuel vehicles.

Allows State highway agencies to establish procedures for the use of alternative fuel vehicles in High Occupancy Vehicle lanes. Allows any person covered by section 501 and any State subject to requirements of section 507(o) to opt out of the Energy Policy Act of 1992. Provides credits under said Act for hybrid vehicles, dedicated alternative fuel vehicles, and infrastructure, and allows the blending of lease condensate gas liquids from natural gas wells with diesel fuel to manufacture an alternative fuel.

Subtitle B – Automobile Fuel Economy

Requires the Secretary of Transportation to consider several criteria, including effects on safety and employment, when setting fuel economy standards, clarifies DOT authority to amend fuel economy standards, and requires an environmental assessment under NEPA for changes in fuel economy standards. Extends the manufacturer incentives and maximum fuel economy increase allowable under the Corporate Average Fuel Economy program for the manufacture and sale of duel fuel automobiles for an additional four years.

Requires Federal agencies to increase the fuel economy of new Federal fleet passenger cars and light trucks by at least 3 mpg by 2005 compared to 1999, requires the establishment of a cost-shared, public-private partnership to improve fuel economy, reduce emissions and lower costs of railroad locomotives, and authorizes \$25 million in fiscal year 2004, \$35 million in fiscal year 2005 and \$50 million in fiscal year 2006. Requires the DOE to study potential technologies to reduce the idling of heavy-duty vehicles.

TITLE VIII – HYDROGEN

Subtitle A – Basic Research Programs

Provides a complete substitute for the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 and authorizes basic research and development activities related to hydrogen energy, fuel cells and related infrastructure. Authorizes activities from applied research to commercial application on advanced hydrogen-powered vehicles and associated infrastructure. Requires the Secretary of Energy to establish an interagency task force to coordinate hydrogen research activities and to submit a coordination plan to Congress. Requires the National Academy of Sciences to periodically review Federal hydrogen energy programs.

Subtitle B – Demonstration Programs

Requires the Secretary of the Energy to establish a demonstration and commercial application program for hydrogen-powered vehicles and associated hydrogen fueling infrastructure, and for stationary hydrogen fuel cells, including residential and commercial building applications. Requires the Secretary of the Interior to study opportunities to use hydrogen fuel cells in national parks, and authorizes \$1 million for fiscal year 2004 and \$15 million for fiscal year 2005.

Requires the Secretary of Energy to establish a demonstration program for fuel cells and related hydrogen technologies for stationary and transportation application in countries other than the U.S., to develop and transmit to Congress a strategy for a demonstration and commercial application program to develop hybrid systems combining distributed renewable generation with fuel cells for use on Indian land, and authorizes \$1 million in fiscal year 2005 and \$5 million in each of fiscal years 2006 through 2008. Requires the establishment of a demonstration program to develop, deploy and commercialize distributed generation systems that significantly reduce the cost of producing hydrogen from renewable energy.

Subtitle C – Federal Programs

Requires the Secretary of Energy to increase public awareness and acceptance of hydrogen fuel technologies and provide university-based hydrogen and fuel cell research training. Requires heads of Federal agencies with annual outlays of \$20 million or less to submit to OMB

and Congress a hydrogen transition plan, and requires each agency to purchase 5 percent hydrogen-powered vehicles for fiscal years 2006 and 2007 and 20 percent for fiscal year 2012 and thereafter, but provides waivers or delays if the cost is 150 percent of comparable alternative fuel vehicles.

Requires the Federal government to offset at least 1 percent of total electricity consumption with fuel cells in fiscal years 2006 through 2008 and not less than 3 percent in 2011 and thereafter and provides \$400 million over five years to offset costs. Requires the Secretary of Energy to submit a plan to identify critical technologies and related targets and timetables for their development to support commercialization of hydrogen-fueled fuel cell vehicles.

TITLE IX – RESEARCH AND DEVELOPMENT

Defines broad goals and requires the Secretary of Energy to publish specific goals with each annual budget submission.

Subtitle A – Energy Efficiency

Sets authorization schedules for energy efficiency and conservation research, development, demonstration, and commercial application activities. Authorizes the Next Generation Lighting Initiative to develop an advanced solid state lighting option and requires the Secretary of Energy to competitively select an Industry Alliance to assist planning and assess progress. Establishes an interagency program to address efforts to reduce energy use in buildings under the Office of Science and Technology Policy and establishes an advisory committee.

Authorizes a program to evaluate secondary use in electric vehicle batteries, and authorizes the Energy Efficiency Science Initiative to be administered by the Assistant Secretary of Energy responsible for energy conservation.

Subtitle B – Distributed Energy and Electric Energy Systems

Provides authorization levels for distributed energy and electric energy systems activities. Authorizes the development of a strategy to develop combined renewable technology and non-intermittent power generation technologies. Authorizes a research and demonstration program for high power density facilities, grants to consortia to develop small-scale combined heat and power systems for residential applications, and assistance to demonstration projects using distributed energy technologies in energy intensive commercial applications.

Creates a new Office of Electric Transmission and Distribution charged with improving the Nation's electricity transmission and distribution. Authorizes a comprehensive research, development and demonstration program to ensure the reliability, efficiency and environmental integrity of electrical transmission systems, and requires a 5-year program plan to be completed within the first year. Establishes initiatives to evaluate and demonstrate high temperature

superconductivity technologies, to research, develop and demonstrate tools to plan, operate and expand transmission and distribution grids in realistic market scenarios.

Subtitle C – Renewable Energy

Provides authorization levels for renewable energy R&D. Authorizes programs of research for bioenergy, biodiesel engine testing, solar power and other miscellaneous projects.

Subtitle D – Nuclear Energy

Provides authorization levels for nuclear energy R&D. Authorizes the Nuclear Energy Research Initiative, Nuclear Energy Plant Optimization, Nuclear Power 2010, Generation IV Nuclear Energy Systems, Reactor Production of Hydrogen, and Nuclear Infrastructure Support Programs. Authorizes the Advanced Fuel Cycle Initiative to evaluate proliferation-resistant fuel recycling and transmutation technologies to support evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts.

Authorizes the establishment of fellowship and faculty assistance programs, maintains university research and training reactors, and encourages university-national lab interactions. Authorizes R&D on improving reactor safety and security, and on alternatives to large industrial radioactive sources.

Subtitle E – Fossil Energy

Provides authorization levels for fossil fuel R&D. Authorizes research programs for coal, oil and gas, and fuel cells, requires a report every two years on oil and gas reserves off the coast of Louisiana and Texas. Establishes a national center of excellence in clean energy and power generation. Authorizes a R&D program on coal mining technologies to reduce contaminant levels, authorizes a broad R&D program on coal and power systems and requires the Secretary of Energy to identify goals for coal-based technologies. Authorizes a testing facility to increase the range of extended drilling technologies.

Subtitle F – Science

Provides authorization levels for the Office of Science and authorizes funding for the International Thermalnuclear Experimental Reactor separate from the rest of the Science budget. Authorizes U.S. participation in the International Thermonuclear Experimental Reactor and requires a comprehensive report on overall program directives. Limits total funds expended for the Spallation Neutron Source, requires the development and implementation of a strategy for maintaining or building essential facilities and infrastructure to support programs at the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, or the Office of Nuclear Energy, Science and Technology. Authorizes R&D programs for catalysis science, a nanoscale science and engineering program, a scientific computing program, in

systems biology and proteomics, a program on material science issues presented by advanced fission reactors and the Department's fusion program, and on energy-related issues associated with water resources, including arsenic removal, desalination, and energy and water sustainability.

Subtitle G – Energy and Environment

Authorizes a joint U.S.-Mexico collaborative program in the border region to promote energy efficiency and reduced environmental risks that contribute to public health issues. Authorizes a loan to the clean coal plant in Healy, Alaska.

Subtitle H – Management

Sets minimum cost sharing requirements from non-Federal sources at 20 percent for R&D and 50 percent for demonstration and commercial application; the requirement may be waved and in kind payments may be accepted. Requires that research proposals be subject to merit review. Requires advisory boards, which may be drawn from the National Academy of Sciences, to review DOE programs at least every 5 years. Establishes a Technology Transfer Coordinator and Tech Transfer Working Group. Establishes a pilot program to encourage technology clusters in support of departmental mission areas and authorizes \$10 million annually for fiscal years 2004 through 2006. Promotes small business participation in procurement and research opportunities, and authorizes \$5 million annually for small business technical assistance grants not to exceed \$10,000 each.

Requires a report on barriers that may exist to inhibit transfer of personnel among the Department of Energy's facilities and laboratories, requires a National Academies study on obstacles to accelerating the transition of energy technology into commercial application, and requires all programs to include a public outreach component. Requires that management and operating contracts for nonmilitary laboratories be subject to competition, but the requirement may be waived by the Secretary. States that reprogramming which changes an individual distribution by more than 5 percent is not allowed unless the Secretary has provided 30 days notice to the appropriate authorizing committees. Requires the Secretary to conform this title to existing law.

Establishes an Under Secretary for Energy and Science, designates the Assistant Secretary of Science as head of the Office of Science, and creates an additional Assistant Secretary position. Expresses the Sense of the Congress that leadership for departmental missions in nuclear energy should be at the Assistant Secretary level. Authorizes the DOE to support competitive science and mathematics events and reauthorizes funding of the Energy Science Education Enhancement Act for \$40 million for each fiscal year from FY 2004 through FY 2008. Authorizes the Secretary of Energy to allow transactions outside a standard contract, grant or cooperative agreement if they are not feasible or appropriate. Requires an investigation and

report to Congress on the scientific and technical merits of any evaluation methodology for scientific and technical programs of the Department of Energy.

TITLE X – PERSONNEL AND TRAINING

Requires DOE to monitor workforce trends in the energy industry, and authorizes the Secretary to establish fellowships for postdoctoral and senior researchers in energy research and development fields. Requires the Secretary of Labor to develop model personnel training guidelines to support electric system reliability and safety. Establishes a National Center on Energy Management and Building Technologies to facilitate improvement of energy efficiency and indoor air quality.

Requires National Laboratories to increase participation of historically Black colleges or universities, Hispanic-serving institutions, or tribal colleges in activities that improve these institutions' ability to train students in scientific and technical careers. Establishes a national training center to train certified operators for electric power generation plants, and requires the Secretary of Labor to hire, train, and deploy additional skilled mine inspectors to maintain the number of Federal mine inspectors at or above the levels authorized by law or established by regulation.

TITLE XI – ELECTRICITY

Amends definitions of "electric utility" and "transmitting utility" in the Federal Power Act (FPA).

Subtitle A – Reliability

Provides procedures for the Federal Energy Regulatory Commission's (FERC) certification and oversight of a FERC-approved electric reliability organization that sets mandatory, enforceable reliability rules for the interstate transmission grid.

Subtitle B – Regional Markets

Remands FERC's proposed rulemaking on Standard Market Design for further consideration and prohibits FERC from issuing a final rule until July 1, 2005. Provides a Sense of the Congress that voluntary Regional Transmission Organizations (RTO) promote competitive markets and benefit consumers. Authorizes the Tennessee Valley Authority to join RTOs. Directs FERC to convene regional discussions with States to address wholesale competitive markets with a focus on issues such as RTO development, interconnection, transmission planning, price signals, seams, and market monitoring.

Subtitle C – Improving Transmission Access and Protecting Service Obligations

Amends the Federal Power Act (FPA) to protect transmission access for load serving entities. Authorizes FERC to require that unregulated transmitting utilities provide open access to their transmission systems at comparable rates that they apply to themselves and on comparable terms and conditions that are not unduly discriminatory. Requires FERC to establish by rule within one year of date of enactment transmission pricing policies and policies for the allocation of costs associated with interconnection of new transmission facilities that are not located within an RTO.

Subtitle D – Amendments to the Public Utility Regulatory Policies Act of 1978

Amends PURPA to require states to consider adoption of net metering standards regarding how on-site energy production will be measured and billed, consider real time and time based pricing and other forms of demand response systems that benefit consumers, and consider standards for interconnection of distributed generation and other generators to the distribution grid; for minimum fuel and technology diversity; and for fossil fuel efficiency. Permits the Secretary of Energy to offer technical assistance to States and electric utilities.

Prospectively repeals PURPA's mandatory purchase requirements if an independently administered, auction-based day ahead and real time market exists and prospectively repeals PURPA's mandatory sale requirements if competing retail suppliers are available. Ensures that public utilities do not directly or indirectly absorb costs associated with purchases from qualifying cogeneration and small power production facilities.

Subtitle E – Provisions Regarding the Public Utility Holding Company Act of 1935 (PUHCA)

Repeals the Public Utility Holding Company Act of 1935. Gives FERC authority to request that each holding company, associate company or affiliate company make available accounts and records that FERC determines are relevant to costs incurred by a public utility or natural gas company and that are necessary and appropriate to protect utility customers with respect to jurisdictional rates.

Requires holding companies, associate companies or affiliate companies to make available to state commissions books, accounts and records that are determined to be relevant to costs incurred and that are necessary and appropriate to protect utility customers with respect to jurisdictional rates. Requires FERC to promulgate a final rule exempting from Federal books and records requirements any person that is a holding company solely with respect to a qualifying facility; wholesale generators or foreign utility companies are exempted.

Preserves the authority of FERC or a state commission to determine if a jurisdictional public utility company can recover in rates costs incurred through transactions with affiliates. Provides that PUHCA provisions do not apply to the U.S. government, any state or political

subdivision, any foreign government authority not operating in the U.S. or any agency, authority or instrumentality of any of the above. Preserves the authorities of FERC or state commissions under other applicable law, authorizes FERC to use its enforcement authorities under the FPA to enforce this subtitle, permits FERC to continue activities authorized as of date of enactment and preserves its authority under FPA and the Natural Gas Act. Authorizes FERC to promulgate regulations to implement this subtitle and submit recommendations to Congress for technical and conforming amendments within 12 months of enactment.

Provides that the Securities and Exchange Commission is to transfer books and records to FERC, and provides that this subtitle takes effect 12 months after the date of enactment. Repeals FPA section 318, dealing with conflicts in jurisdiction between PUHCA and the FPA.

Subtitle F – Market Transparency, Anti-Manipulation and Enforcement

Requires FERC to establish an electronic system to provide information on the availability and price of wholesale electric energy and transmission services, and prohibits filing of false information and round trip trading. Expands the scope of who can file complaints and against whom complaints can be filed under FPA, extends FERC's investigative authority to transmitting utilities, and increases penalties under the FPA and the Natural Gas Act. Amends FERC's authority to allow refunds under the FPA as of the date of the filing of a complaint.

Subtitle G – Consumer Protections

Directs the Federal Trade Commission (FTC) to promulgate rules regarding disclosure of consumer information, and directs the FTC to issue rules to prohibit changes of electric utility service without consumer consent (slamming) and sales of services without consumer consent (cramming).

Subtitle H – Technical Amendments

Corrects technical errors in the FPA.

S. 597 - FINANCE COMMITTEE PROVISIONS

On April 2, 2003 the Senate Finance Committee adopted, by voice vote, S. 597, an \$18.6 billion package of energy-related tax provisions meant to encourage alternative and traditional energy production, along with conservation and energy efficiency. The contents of the bill will be introduced as an amendment to S. 14.

The bill includes an extension of the first-ever wind energy tax credit. It extends the tax credit for biomass production; provides an income tax credit and excise tax rate reduction for biodiesel fuel mixtures; helps smaller, cooperative ethanol producers; creates a production tax

credit for electricity generated from swine and bovine waste; and establishes a tax credit for the manufacture and use of super energy-efficient washing machines and refrigerators.

Additionally, the proposal establishes a tax credit for the purchase of alternative motor vehicles, including electric cars, and it extends the deduction for alternative vehicles, including hydrogen fuel-cell cars. It also provides tax credits for the installation of alternative fueling stations and retail sales of alternative fuels.

Finally, the proposal reforms the ethanol tax exemption so that ethanol-blended fuels make the same contribution to the highway trust fund as regular gasoline while also retaining an important incentive to promote the use of domestic, renewable fuels.

Below is a brief description of each provision. For a full description of the finance package please visit the Joint Committee on Taxation website at http://www.house.gov/jct/pubs03.html.

I. RENEWABLE ENERGY

A. Extension and Modification of the Section 45 Electricity Production Credit

The proposal extends the placed-in-service date for wind facilities, closed-loop biomass facilities, and poultry waste facilities to facilities placed in service after December 31, 1993 (December 31, 1992 in the case of closed-loop biomass facilities and December 31, 1999 in the case of poultry waste facilities) and before January 1, 2007. The taxpayer may claim the section 45 credit against both the regular and the alternative minimum tax for the first four years of production.

The proposal also defines six new qualifying energy resources: biomass (including agricultural livestock waste nutrients), geothermal energy, solar energy, small irrigation power, municipal biosolids, and recycled sludge.

II. ALTERNATIVE VEHICLES AND FUEL INCENTIVES

A. Modifications and Extensions of Provisions Relating to Electric Vehicles, Clean-Fuel Vehicles, and Clean-Fuel Vehicle Refueling Property

The proposal would provide a credit for the purchase of a new qualified fuel cell motor vehicle, a new advanced lean burn technology motor vehicle, a new qualified hybrid motor vehicle, and a new qualified alternative fuel motor vehicle. It would also provide a tax credit for the installation of clean-fuel vehicle refueling property.

B. Modifications to Small Producer Ethanol Credit

First, the proposal liberalizes the definition of an eligible small producer to include persons whose production capacity does not exceed 60 million gallons. Second, the proposal allows cooperatives to elect to pass-through the small ethanol producer credits to its patrons. Third, the proposal repeals the rule that includes the small producer credit in income of taxpayers claiming it and liberalizes the ordering and carryforward/carryback rules for the small producer ethanol credit. Fourth, the proposal allows the small producer credit to be claimed against the alternative minimum tax. Finally, the proposal provides that the small producer ethanol credit is not treated as derived from a passive activity under the Code rules restricting credits and deductions attributable to such activities.

C. Tax Credit for Biodiesel Fuel Mixtures

The proposal provides a new income tax credit for qualified biodiesel fuel mixtures. The structure of the new credit would be similar to the structure of the present-law alcohol fuels credit.

III. CONSERVATION AND ENERGY EFFICIENCY PROVISION

A. Business Credit for Construction of New Energy-Efficient Homes

The proposal provides a credit to an eligible contractor of an amount equal to the aggregate adjusted bases of all energy-efficient property installed in a qualified new energy-efficient home during construction.

B. Tax Credit for Energy-Efficient Appliances

The proposal provides a credit for the production of certain energy-efficient clothes washers and refrigerators.

C. Credit for Residual Energy Efficient Property

The proposal provides a personal tax credit for the purchase of qualified wind energy property, qualified photovoltaic property, and qualified solar water heating property that is used exclusively for purposes other than heating swimming pools and hot tubs.

D. Business Tax Incentives for Fuel Cells

The proposal provides a 30 percent business energy credit for the purchase of qualified fuel cell power plants for businesses.

E. Allowance of Deduction for Energy-Efficient Commercial Building Property

The proposal provides a deduction equal to energy-efficient commercial building property expenditures made by the taxpayer.

F. Three-Year Applicable Recovery Period for Depreciation of Qualified Energy Management Devices

The proposal provides a three-year recovery period for qualified new energy management devices placed in service by any taxpayer who is a supplier of electric energy or is a provider of electric energy services.

G. Three-Year Applicable Recovery Period for Depreciation of Qualified Water Submetering Devices

The proposal provides a three-year recovery period for qualified new water submetering devices placed in service by any taxpayer who is an eligible resupplier.

H. Energy Credit for Combined Heat and Power System Property

The proposal provides a 10-percent credit for the purchase of combined heat and power property.

I. Credit for Energy Efficiency Improvements to Existing Homes

The proposal would provide a 10-percent nonrefundable credit for the purchase of qualified energy efficiency improvements.

IV. CLEAN COAL INCENTIVES

A. Investment and Production Credits for Clean Coal Technology

The proposal creates three new credits: a production credit for electricity produced from qualifying clean coal technology units; a production credit for electricity produced from qualifying advanced clean coal technology units; and a credit for investments in qualifying advanced clean coal technology.

V. OIL AND GAS PROVISIONS

A. Tax Credit for Oil and Gas Production from Marginal Wells

The provision would create a new, \$3 per barrel credit for the production of crude oil and a \$0.50 credit per 1,000 cubic feet of qualified natural gas production.

B. Natural Gas Gathering Lines Treated as Seven-Year Property

The proposal establishes a statutory seven-year recovery period and a class life of 10 years for natural gas gathering lines.

C. Expensing of Capital Costs Incurred and Credit for Production in Complying with Environmental Protection Agency Sulfur Regulations

The proposal generally permits small business refiners to claim an immediate deduction (i.e., expensing) for up to 75 percent of the qualified capital costs paid or incurred for the purpose of complying with the Highway Diesel Fuel Sulfur Control Requirements of the Environmental Protection Agency.

D. Determination of Small Refiner Exception to Oil Depletion Deduction

The proposal increases the current 50,000-barrel-per-day limitation to 60,000. In addition, the proposal changes the refinery limitation on claiming independent producer status from a limit based on actual daily production to a limit based on average daily production for the taxable year.

E. Extension of Suspension of Taxable Income Limit With Respect to Marginal Production

The suspension of the 100-percent net-income limitation for marginal wells is extended through taxable years beginning before January 1, 2007.

F. Amortization of Geological and Geophysical Expenditures

The proposal allows geological and geophysical costs incurred in connection with oil and gas exploration in the United States to be amortized over four years.

G. Amortization of Delay Rental Payments

The proposal allows rental payments incurred in connection with the development of oil or gas within the United States to be amortized over two years.

H. Extension and Modification of Credit for Producing Fuel From a Non-Conventional Source

The proposal extends the placed in service date for certain facilities that would otherwise qualify for the section 29 credit under present law and modifies the amount of the credit. The proposal also extends the class of facilities that are eligible for the credit.

I. Natural Gas Distribution Lines Treated as Fifteen-Year Property

The proposal establishes a statutory 15-year recovery period and a class life of 20 years for natural gas distribution lines.

VI. PROVISIONS RELATING TO ELECTRIC INDUSTRY RESTRUCTURING

A. Modification to Special Rules for Nuclear Decommissioning Costs

The proposal repeals the cost of service requirement for deductible contributions to a nuclear decommissioning fund. Thus, all taxpayers, including unregulated taxpayers, would be allowed a deduction for amounts contributed to a qualified fund.

The proposal also clarifies the Federal income tax treatment of the transfer of a qualified fund.

Finally, the proposal permits a taxpayer to make contributions to a qualified fund in excess of the ruling amount in one circumstance.

B. Treatment of Certain Income of Cooperatives

The proposal provides that income received or accrued by a rural electric cooperative from any "open access transaction" is excluded in determining whether a rural electric cooperative satisfies the 85-percent test for tax exemption under section 501 (c) (12).

The proposal provides that income received or accrued by a rural electric cooperative from any "nuclear decommissioning transaction" also is excluded in determining whether a rural electric cooperative satisfies the 85-percent test for tax exemption under section 501 (c) (12).

The proposal provides that gain realized by a tax-exempt rural electric cooperative from a voluntary exchange or involuntary conversion of certain property is excluded in determining whether a rural electric cooperative satisfies the 85-percent test for tax exemption under section 501 (c) (12).

The proposal provides that income from the prepayment of any loan, debt, or obligation of a tax-exempt rural electric cooperative that is originated, insured, or guaranteed by the Federal Government under the Rural Electrification Act of 1936 is excluded in determining whether the cooperative satisfies the 85-percent test for tax exemption under section 501(c)(12).

The proposal provides that income received or accrued by a tax-exempt rural electric cooperative from a "load loss transaction" is treated under 501(c)(12) as income collected from

members for the sole purpose of meeting losses and expenses of providing service to its members.

The proposal provides that the receipt or accrual of income from load loss transactions by taxable electric cooperatives is treated as income from patrons who are members of the cooperative.

C. Sales or Dispositions to Implement Federal Energy Regulatory Commission or State Electricity Restructuring Policy

The proposal permits a taxpayer to elect to recognize gain from a qualifying electric transmission transaction ratably over an eight-year period beginning in the year of sale.

VII. ADDITIONAL PROVISIONS

A. Extension of Accelerated Depreciation and Wage Credit Benefits on Indian Reservations

The provision extends the accelerated depreciation incentive for one year (to property placed in service before January 1, 2006).

The provision extends the Indian employment credit incentive for one year (to taxable years beginning before January 1, 2006).

B. Corporate Expatriation

The proposal denies the tax benefits of corporate inversion transactions completed after March 4, 2003 and before January 1, 2005, effectively imposing a moratorium on such transactions. The Joint Committee on Taxation estimates that this measure would raise \$83 million in revenues.

The proposal also contains a Sense of the Congress "that passage of legislation to fix the underlying problems with our tax laws is essential and should occur as soon as possible, so United States corporations will not face the current pressures to engage in inversion transactions."

ADMINISTRATION POSITION

No Statement of Administration Position had been issued at the time of publication of this Notice. However, the Administration has expressed positions on a number of energy topics related to S. 14. The Administration supports opening ANWR to oil and gas exploration to enhance domestic energy supplies (which is not included in this bill); supports extension of the Price-

Anderson Act to cover NRC licensees and DOE contractors; and supports the electricity title. The administration opposes higher CAFE standards.

COST

The Congressional Budget Office estimates that S. 14 will cost \$3.7 billion in 2004, \$40.3 billion over the next 5 years, and \$52.6 billion over the next 10 years. It also estimates that implementing S. 14 would increase direct spending by \$94 million in 2003, \$212 million in 2004, and \$5.1 billion over the 2003 through 2013 period. It also estimates that the bill will increase revenues by \$75 million in 2004 and \$820 million over the 2004 to 2013 period.

OTHER VIEWS

On April 11, the House passed H.R. 6, the Energy Policy Act of 2003, by a vote of 247-175. The bill contains provisions on oil and gas exploration in ANWR, an Alaska natural gas pipeline, electricity restructuring, extension of Price-Anderson indemnification authority, Indian energy, oil and gas royalty relief, clean coal and hydrogen research. Attempts to increase fuel efficiency standards for automobiles and Sport Utility Vehicles failed.

POSSIBLE AMENDMENTS

A large number of amendments, perhaps as many as 200 to 300, can be anticipated to many provisions of S. 14. Possible amendments will address such issues as climate change, renewable portfolio standards, ethanol mandates, Corporate Average Fuel Economy standards, and opening a portion of the Arctic National Wildlife Refuge to natural gas and oil exploration.